

## Abstract

The invention provides a method for managing data transmission performed in a radio network controller during UE handover procedure. The method is performed in a RNC having a distributed architecture, and comprises the following steps: acquiring a handover request transmitted by UE from a first ATM interface board, by one of the plurality of radio signaling management boards; creating mapping between one of the plurality of data transmission management boards and a second ATM interface board, by the radio signaling management board, said data transmission management board having mapping to the first ATM interface board before handover; and informing UE of performing data transmission between the data transmission management board and the second ATM interface board, by the radio signaling management board. When UE executes handover between two cells dominated by the same RNC, the method avoids frequent shifting of data of the same UE between different data transmission management boards, thereby decreasing the load in the procedure of transmitting and handling of system signaling, improving effective handling capability of the system, and additionally reducing the probability of losing data packets of the system.